Lesson 1-5

Wednesday, August 14, 2019 10:31 AM

MB 29

Name _____

Solve

Lesson 1-5
Compare Decimals

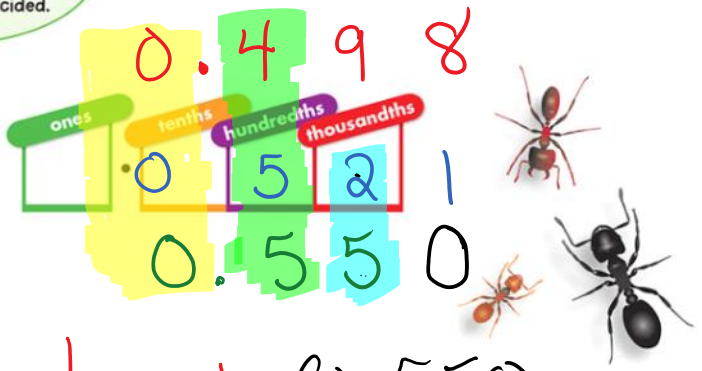
I can ...
compare decimals to the thousandths.

I can also look for patterns to solve problems.

Solve & Share

The lengths of three ants were measured in a laboratory. The lengths were 0.521 centimeter, 0.498 centimeter, and 0.550 centimeter. Which ant was the longest? Which ant was the shortest?

How can you use structure to compare and order the decimals? Tell how you decided.



Longest 0.550 cm

Shortest 0.498 cm

Look Back! Be Precise What are the lengths of the ants in order from least to greatest?

0.498, 0.521, 0.550

Digital Resources at PearsonRealize.com **Topic 1** | Lesson 1-5 **29**

Learn Glossary A-Z

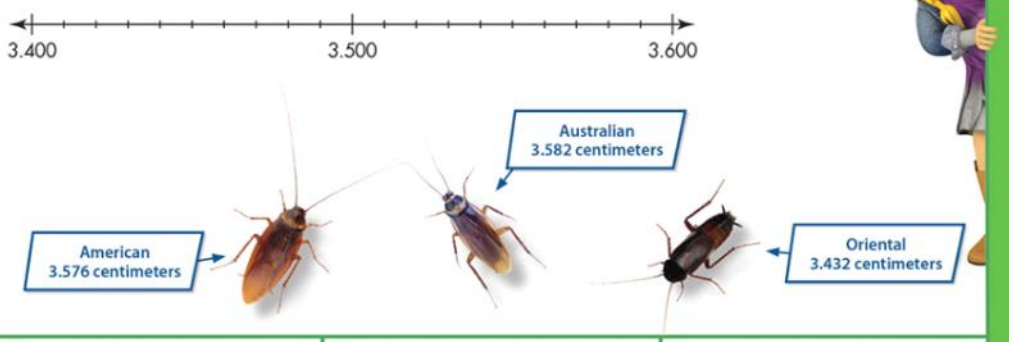
Essential Question

How Can You Compare Decimals?

A

Scientists collected and measured the lengths of different cockroach species. Which cockroach had the greater length, the American or the Oriental cockroach?

Comparing decimals is like comparing whole numbers!



B Step 1

Line up the decimal points.

Start at the left.

Compare digits of the same place value.

3.576

3.432

C Step 2

Find the first place where the digits are different.

3.576

3.432

D Step 3

Compare.

$5 > 4$

$0.5 > 0.4$

So, $3.576 > 3.432$.

The American cockroach is longer than the Oriental cockroach.

Convince Me! **Critique Reasoning** Valerie said, "12.68 is greater than 12.8 because 68 is greater than 8." Is she correct? Explain.

No. Both numbers have 12 to the left of the decimal, but 12.8 has an 8 in the tenths and 12.68 only has a 6 in the tenths place.

$12.8 > 12.68$ and $12.80 > 12.68$

Name _____

Practice Buddy | Tools | Assessment

Another Example

Order the cockroaches from least to greatest length.

Step 1

Write the numbers, lining up the decimal points. Start at the left. Compare digits of the same place value.

3.576
3.432
3.582

3.432 is the least.

Step 2

Write the remaining numbers, lining up the decimal points. Start at the left. Compare.

3.576
3.582

3.582 is greater than 3.576.

Step 3

Write the numbers from least to greatest.

3.432 3.576 3.582

From least to greatest lengths are the Oriental, the American, and the Australian.

Guided Practice

Do You Understand?

1. **Critique Reasoning** Scientists measured a Madeira cockroach and found it to be 3.44 centimeters long. Toby says that the Madeira is shorter than the Oriental because 3.44 has fewer digits than 3.432. Is he correct? Explain.

3.440
3.432

No. The Madeira is longer. The ones and tenths are equal but 4 hundredths is greater than 3 hundredths.

Do You Know How?

In **2** and **3**, write >, <, or = for each ◯.

2. 3.692 ◯ 3.697 < 7.216 ◯ 7.203 >

In **4** and **5**, order the decimals from least to greatest.

4. 5.540, 5.631, 5.625

5.540, 5.625, 5.631

5. 0.675, 1.529, 1.35, 0.693

0.675, 0.693, 1.350, 1.529

5.540
5.631
5.625
0.675
1.529
1.350
0.693

Complete 6, 7, 8, 9, 15 & 17

6. 0.890 ◯ 0.89 \ \ 0

7. 5.733 ◯ 5.793

8. 9.707 ◯ 9.717 \

9. 878.403, 887.304, 887.043

887.304, 887.043, 878.403

878.403
881.304
887.043

15. **Higher Order Thinking** Ana's gymnastics scores were posted on the scoreboard in order from highest to lowest score. One digit in her floor score is not visible. List all the possible digits for the missing number.

15.500
15._66
15.133
14.200

Possible digits:
1, 2, 3, or 4

17. A grain of fine sand can have a diameter of 0.125 millimeter. Which numbers are less than 0.125?

- [ ] ~~0~~ 00 < 0.125
- [ ] 0.2 00 > 0.125
- [ ] 0.13 0 > 0.125
- [ ] ~~0.12~~ 0 < 0.125
- [ ] 0.126 > 0.125